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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,701	09/30/2003	Roger Petrus Gerebern Vandecruys	JAB-1467 CONT	4563

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EXAMINER	
YOUNG, MICAH PAUL	
ART UNIT	PAPER NUMBER
1618	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/674,701	VANDECRUYS ET AL.	
	Examiner	Art Unit	
	Micah-Paul Young	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-28 and 30-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-28 and 30-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/18/06 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 20-28,30 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined disclosures Rickey et al (USPN 5,792,477 hereafter '477) in view of Shimizu et al (USPN 5,824,339 hereafter '339). The claims are drawn to a solid formulation comprising

9-hydroxy risperidone, or a pharmaceutically acceptable salt, and one or more hydrophilic polymers.

2. The '477 patent teaches a microparticle formulation comprising biodegradable polymers such as poly-lactic acids and 9-hydroxy risperidone, along with other hydrophilic polymers such as polyvinyl pyrrolidone, and carboxymethylcellulose (col. 5, lin. 29-56; col. 13, lin. 60-col. 14, lin. 11). The hydrophilic polymers are present in an amount from 0.5-2% wt. (*Ibid.*). The reference discloses a method for the delivery of the microparticles to a patient (col. 7, lin. 35-43). The reference is silent to the inclusion of pregelatinized starch yet the inclusion of such a common excipient is well known it the art as seen in the '339 patent.

3. The '339 reference discloses antibiotics in combination with various water-soluble polymers (col. 5, lin. 9-35). The hydrophilic polymers include hydroxypropylcellulose with a viscosity between 1-150,000 cps (col. 4, lin. 55-60), and hydroxypropylmethylcellulose with a viscosity between 1-40,000 centistokes (col. 5, lin. 1-8). The formulation can comprise both celluloses at prescribed ratios (col. 6, lin. 52 – 62), in addition to further excipients such as pregelatinized starches and other well-known excipients (col. 6, lin. 42). One of ordinary skill in the art would have been motivated to include the viscous hydroxypropyl cellulose polymers of the '339 reference in order to improve the stability of the microparticle formulation. Further since both reference comprise similar components such as carboxymethylcellulose and other hydrophilic polymers, an artisan of ordinary skill would be able to simply substitute the viscous polymers in order to improve the stability.

4. With these things in mind it would have been obvious to combine the highly viscous polymers of the '339 patent with the formulation of the '477 patent in order to provide stability

and a controlled release to the microparticles. The '447 suggests the inclusion of carboxymethylcellulose, while the '339 patent discloses the use of either carboxymethylcellulose or hydroxypropylcellulose polymers. It would have been obvious to combine the teachings with an expected result of a control releasing formulation of a solid dosage from.

5. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rickey et al (USPN 5,792,477 hereafter '477) and Yajima et al (USPN 5,972,373 hereafter '373). The claims are drawn to a controlled release formulation comprising 9-hydroxyrisperidone and hydrophilic polymers.

6. As discussed above the '477 patent discloses a formulation comprising 9-hydroxyrisperidone and various hydrophilic polymers. The reference however is lacking a disclosure of the particular polymers of applicant.

7. The '373 patent discloses a taste masking formulation for various antibiotic agents (abstract). The formulation comprises hydrophilic polymers including hydroxypropylcellulose, hydroxypropylmethylcellulose, pregelatinized starch, and cyclodextrins (col. 3, lin. 13 – 56). Since similar antibiotics are masked by this formulation (col. 2, lin. 38-48), a skilled artisan would have been motivated to use the polymers of the '373 patent in order to impart stability and taste masking properties to the presentation.

8. Regarding claims that recite specific ratios and concentrations, it is the position of the examiner that such limitations do not impart patentability on the claims, since they merely represent an optimize range that can be determined through routine experimentation. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the

optimum or workable ranges by routine experimentation. *See* In re Aller, 220 F.2d 454 105 USPQ 233, 235 (CCPA 1955).

9. Furthermore the claims differ from the reference by reciting various concentrations of the active ingredient(s). However, the preparation of various cosmetic compositions having various amounts of the active is within the level of skill of one having ordinary skill in the art at the time of the invention. It has also been held that the mere selection of proportions and ranges is not patentable absent a showing of criticality. *See* In re Russell, 439 F.2d 1228 169 USPQ 426 (CCPA 1971).

10. . With these things in mind it would have been within the level of skill in the art to combine the antibiotic of '477 with the hydrophilic polymers of '373 in order to impart stability and taste masking properties on the formulation. A skilled artisan would make this combination with an expected result of a stable, pleasantly tasting antibiotic formulation.

Response to Arguments

11. Applicant's arguments with respect to claims 20-28,30-34 have been considered but are moot in view of the new ground(s) of rejection. However as applicant has pointed out the '477 patent is silent to the inclusion of pregelatinized starch, yet discloses common excipient useful in the controlled release of active agent such as gelatin and polyvinylpyrrolidone (col. 13, lin. 65-67). The supporting references provide disclosures to remedy this silence by providing similar antibacterial dosage forms in controlled release form. For these reasons the newly cited rejection obviates the claims.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Micah-Paul Young whose telephone number is 571-272-0608. The examiner can normally be reached on M-F 7:00-4:30 every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Micah-Paul Young
Examiner
Art Unit 1618

MP Young

MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER